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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/608,803

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Thomas W. Ives

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01/28/2005

HEWLETT-PACKARD COMPANY

Intellectual Property Administration

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EXAMINER

GUSHI, ROSS N

ART UNIT

PAPER NUMBER

2833

DATE MAILED: 01/28/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/608,803

Applicant(s)

IVES ET AL.

Examiner

Ross N. Gushi

Art Unit

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12/29/04
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 6-8, 10, 12-16, 21-27 is/are pending in the application.
- 4a) Of the above claim(s) 23-27 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 6-8, 10, 12-14, 21, 22 is/are rejected.
- 7) ☒ Claim(s) 15, 16 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Election/Restrictions

Claims 23-27 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected species, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 6/10/04. A complete reply to the final rejection must include cancellation of nonelected claims or other appropriate action (37 CFR 1.144) See MPEP § 821.01.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in —

(1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b) only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or

(2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a);

Claims 1, 10, and 22 are rejected under 35 U.S.C. 102(b) as being anticipated by Yeager et al. ("Yeager").

Per claim 1, Yeager discloses an apparatus for electrically connecting two objects together, including a first object 30 including contacts, a second object 10 including contacts and the open ended trough as claimed (see figure 1).

Per claim 10, the first and second objects are configured such that the ridge and the trough can be engaged and disengaged by movement of the first object relative to the second object along a substantially continuous path of movement that is substantially parallel to the ridge and trough (see figure 3).

Per claim 22, Yeager discloses an alignment member (14,1 6) which is movably supported on the second object, and wherein a cam surface is defined on the alignment member and is configured to resiliently deflect the second electrical contacts during movement of the alignment member so as to selectively cause the second electrical contacts to contact the first electrical contacts after placement of the first and second objects adjacent to one another.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1, 6, 7, 10, 12-14, and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tyree in view of Todd.

Regarding claim 1, Tyree discloses an apparatus for electrically connecting two objects together, a (second) object which has a (second) connective surface defined thereon, a row of second electrical contacts supported on the second connective surface and configured to contact the first electrical contacts, and an open-ended trough defined on the second connective surface (see figure 1).

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Tyree does not show the first connective surface. Todd discloses a first object 120 which has a first connective surface defined thereon, a row of first electrical contacts 137 supported on the first connective surface. At the time of the invention, it would have been obvious to use a the Todd object to connect with the Tyree object. The suggestion or motivation for doing so would have been to facilitate electrical transmissions and communications between the devices, as taught in Todd and as is well known in the art.

Per claim 6, Todd discloses an alignment member (108, 106, 110) which is movably supported the first object and which is configured to engage the second object (at 126, 128) when moved so as to substantially align the first electrical contacts with the second electrical contacts in order to facilitate electrical connection therebetween. At the time of the invention, it would have been obvious to use the alignment mechanism disclosed in Todd to connect the Todd and Tyree connectors. This would include reversing the cams 106, 108 to be on the Tyree second object and putting the posts 126, 128, on the Todd first object. The suggestion or motivation for doing so would have been to facilitate correct mating of the devices as taught in Todd (col. 1). The reversal of the cam and posts on the objects would have been a matter of obvious engineering choice, being merely a reversal of parts. In re Gazda, 104 USPQ 400 (CCPA 1963).

Per claim 7, the first and second connective surfaces are substantially parallel and in juxtaposed relation when the first and second objects are electrically connected.

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Per claim 10, the first and second objects are configured such that the ridge and the trough can be engaged and disengaged by movement of the first object relative to the second object along a substantially continuous path of movement that is substantially parallel to the ridge and trough (in particular, the connecting objects are free to move unconstrained along paths parallel to the trough and ridge until they are adjacent each other, and then the objects are moved perpendicular to the axis of the ridge and trough to mate, by means of the alignment member, just as is disclosed by applicant).

Per claims 12, 14, and 21, Todd discloses a first cam surface (in particular the bottom walls of the cam slots 110, 112) is defined on the alignment member and is configured to contact the first object during rotation of the alignment member so as to substantially align the first object in a lateral direction, a second cam surface (in particular the side walls of the cam slots 110, 112) is defined on the alignment member and is configured to contact the first object during rotation of the alignment member so as to substantially align the first object in a fore-and-aft direction.

Per claim 13, the alignment member locks the objects together.

Claims 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tyree in view of Todd as in claim 1 in view of Davis et al. ("Davis") and Clewes. Todd does not indicate whether the contacts are deflectable. Davis discloses flexible contacts 4, 9. At the time of the invention, it would have been obvious to make the Todd contacts flexible as taught in Davis. The suggestion or motivation for doing so would have been to

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make the connection more durable compared to using the pads of a printed circuit board, as discussed and taught in Clewes (See Clewes col. 1, lines 1-20).

Response to Arguments

Applicant argues with impressive length and incredulity against the examiner's position that the rack and guides disclosed in figures 4, 5, and 7 are incompatible with the elected species (figures 11-18). Remarks, pages 6-12. To the extent that the arguments are relevant to the withdrawal of claims 23-27 from consideration, the examiner maintains, however, that movement of the first and second objects 110, 120 in **ANY** direction other than the first and second directions 141, 142, would **REQUIRE** an **alternative configuration (not shown)** of the rack 130 which would allow such movement. That is, it is understood that the configuration of the rack 130 shown in Figs. 4, 5 and 7 allows movement of the first and second objects 110, 120 in the first and second directions 141, 142 **ONLY**. Although applicant may now find such a position unbelievable, unsupportable, or preposterous, the examiner points out that at the time the specification was written, this was applicant's position and these are applicant's very words. Specification page 12, lines 1-7, emphasis added.

Allowable Subject Matter

Claims 15 and 16 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. Regarding claims 15 and 16, the prior art does not suggest the as claimed, including the combination of all the

claimed elements, the combination including the third cam surface configured to deflect the second contacts as claimed.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ross Gushi whose telephone number is (571) 272-2005. If attempts to reach the examiner by phone are unsuccessful, the examiner's supervisor, Paula A. Bradley, can be reached at 571-272-2800 extension 33. The phone number for the Group's facsimile is (703) 872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for

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published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



ROSS GUSHI
PRIMARY EXAMINER